### **MEMORANDUM**

TO: Jeffrey B. Richardson, Assistant City Manager

FROM: Gregory H. Grayson, CFO, Fire and Rescue Chief

RE: Summary of Comments Regarding AFR Quick Response Vehicles

At the request of the Public Safety Committee, we have assembled some feedback from our fire officers that are assigned 7/24/365 to the two quick response vehicles that City Council funded late in FY 03-04 and that were put into service in October, 2004. The comments that we have listed below are actual comments given by the officers, without any edit or prompt from me whatsoever. One of the two vehicles that Council funded was placed in Station 1 – Downtown. That unit is referred to as "Tac 1". The second unit was placed in Station 8 – East Asheville and is referred to as "Tac 8". These two newer units are most ideal to meet our objectives of reduced travel time and reduced operating costs per mile.

Within the table below, Fleet Manager Chris Dobbins has outlined the costs and efficiency in operating these two units over the past twelve months, for the period of March 1, 2005 through February 28, 2006.

**Table 1. Equipment Operating Costs for the Last 12 Months** 

Equipment Description	Cost/Mile	Total Costs Last 12 Months	Fuel Used Gallons/Type	Average MPG	Total Miles Last 12 Months
<b>Ladder 1</b> 2001 E-1 (939)	\$4.82	\$13,932	1,853 Diesel	1.6	2,888
<b>Tac-1</b> 2005 Ford F350 Pickup Tac-1 (930)	\$1.04	\$ 4,179	595 Diesel	6.8	4,022
<b>Ladder 8</b> 2002 Pierce (952)	\$4.71	\$28,853	2,401 Diesel	2.6	6,129
Tac-8 2004 Dodge Durango (962)	\$0.32	\$1,260	440 Unleaded	9.0	3,952

The entire premise of using quick response vehicles is to most importantly reduce response time for emergency medical and other calls. However, secondly, it is to help control our operating costs. This is especially important with the significant rising costs of fuel. From the previous table, you can easily see that Tac-1 saved taxpayers @ \$15,203.00. Tac-8 saved taxpayers @ \$17,349.00 during this period. This totals @ \$32,552.00. However, initial purchase costs of the apparatus must also be considered. Based upon the data that we have at this time, we will recover the initial costs in year 3 of operating these vehicles.

#### **Downtown**

Ladder 1 2001 E-One Ladder – cost new @\$750,000.00 Tac 1 2005 Ford Pickup – cost new @\$60,000.00

**East Asheville** 

Ladder 8 2002 Pierce Ladder – cost new @800,000.00 Tac 8 2004 Dodge Durango – cost new @25,000.00

# Comments regarding Tac-1 responding from Station 1 - Downtown

#### As Reported by Captain Darren McElreath.

Tac-1 has the abilities to be used in a number of different areas in the fire service. Listed below are some examples of these benefits that a Tac-Truck has over an Engine or Ladder Truck.

- 1. Quicker responses on EMS and small fires calls.
- 2. Has capabilities to get into smaller spaces.
- 3. Greater accessibility to brush fires by being able to get closer then a regular fire truck.
- 4. Able to get into parking decks.
- 5. Has the ability to use compress foam or water.
- 6. More fuel efficient then an Engine or Ladder Truck.
- 7. Has the capabilities as a compress foam truck to be use with a decon foam.
- 8. Has the ability to protect structures from fire by coating the structure with foam.
- 9. Has four wheel drive for off road use and severe weather.
- 10. Capable of getting into tight alleys and down small streets.
- 11. Vehicle for the wild land team use.
- 12. Tac-1 has proven it's abilities in the fire department by protecting a structure during a wild land fire, responding to EMS calls, and other responses area.

# As Reported by Captain James Cowan

In regards to the utilization of the new Tac 1, it has proven to be very beneficial on several calls. One call involved the BB&T parking deck (third level). A person had slipped and fell on ice during inclement weather. The size of the new Tac truck allowed for quick access to the subject, while the EMS crew had to walk up to the patient from Broadway. Tac 1 was also utilized during inclement weather for welfare checks instead of using the larger Aerial trucks. The truck is also a great asset during stormy weather for accessing down trees and power lines. Although we have not had the opportunity to use Tac 1 for wildland firefighting it will be a useful tool for this job when the need arises.

# As Reported by Captain Steve Fridl

General Characteristics.

- Handles and maneuvers extremely well. Is quite mobile.
- It is well-suited for EMS response, as well as other tactical and/or support needs.
- Has good power and torque.
- Has good braking and towing capability.

# Specific Dimensions.

- Vehicle size is a good fit for the job and task required.
- Single rear wheels provide a lower overall width profile this is a definite plus.
- Accessibility to most parking garages/decks due to the low height profile is also a big plus.
- 4x4 capability is the only way to go.

#### Overall Summary.

- Engineers seem to like this vehicle it is easy to drive and easy to see out of.
- The SCBA-integrated jump seat is a great feature.
- Sprayed-on bed liner is also a great feature.
- Fire suppression capability is another excellent feature.

# As Reported by Engineer Eddie Wyatt

After having the opportunity to operate Tac 1 out of Fire Station 1 for the previous year the following are some advantages that I have identified:

- Highly maneuverable, able to access difficult to reach areas of the city e.g. Beaucatcher and Sunset Mountains
- Enables ladder company to access parking decks
- Foam unit is especially effective for urban interface brushfires, vehicle fires, and defensive mode structure fires
- Four wheel drive all weather capability
- Faster response times than engines and ladders
- Cheaper operating costs per response than larger apparatus
- Prevents undue wear and tear on larger apparatus

## As Reported by Captain Roger Cantrell

Tac-1 is a 2004 extended cab Ford F-350 with a 200 gal compressed air foam system skid unit. Being is equipped with various wild land firefighting paraphernalia and self-contained breathing apparatus, this vehicle has been very beneficial in providing quality service expected by the Asheville Fire Rescue. A smaller vehicle allows us to negotiate streets and terrain that otherwise would be inaccessible to a larger apparatus. The 4x4 capability has been very useful during inclement weather situations. Tac-1 has also proven advantageous for EMS calls where time is of the essence. The only negative to this type of configuration is the limited seating, this design only allows for three personnel. In conclusion Tac-1 is a valuable resource for ladder companies.

### Comments regarding Tac-8 responding from Station 8 - Tunnel Road

# As Reported by Captain Ken Radford

We have had Tac-8 for approx. 18 months now and as far as I know, there have not been any complaints. Our response times have improved, and it has come in very handy in certain areas where access is limited. Two examples are Homeland Park and Sondley Estates. Homeland Park has very narrow streets. The Tac unit is able to effectively navigate streets that would be difficult with fire apparatus. Sondley Estates have some of the steepest grades in our response area. I estimate our response time to several areas of this community have been reduced by three to four minutes when responding with the Tac unit versus an engine.

As for the vehicle itself, the Dodge Durango is performing very well. The handling, maneuverability, acceleration, and braking aspects have not been a problem. As for the comfort of the interior, I would give it a fair rating. It is slightly cramped due to the amount of equipment we must carry. However this really isn't a problem because of the limited amount of time we actually spend in the vehicle. (Also, anything larger would not fit in our bay.)

This vehicle does suit the need that it was intended for.

#### As Reported by Captain Roger Cantrell

This letter is in response to the recent assignment of a tactical unit to Station 8. This addition has been very beneficial. Since receiving this vehicle, Ladder 8's response time to E.M.S. calls has noticeably improved. The versatility of this Q.R.V., versus the fire aerial apparatus, allows us to respond to areas in our district which could be time consuming with the larger vehicle. Some examples include, Homeland Park, Craig Circle, Arnold Road, Keenan Road, Northington Drive, and Fairstock Alley.

This vehicle has saved wear and tear on the fire aerial apparatus reducing maintenance and fuel costs especially in a time of rising fuel prices. The benefits of a Q.R.V. far outweigh any negative aspects associated with it.

## As Reported By Captain Mike Bellows

Tac 8 has been a very valuable resource to our crew at station 8 in east Asheville. Before acquiring this vehicle we had to make all runs in Ladder 8; fire and EMS calls. Obviously, some of the tight city streets in east Asheville made this challenging. In this report I would like to point out three areas that I have observed that have significantly improved since acquiring Tac 8. These areas include the following:

- Saves "wear and tear" on Ladder 8
- Significantly more maneuverable and agile on tight city streets or gaining access to remote locations
- More economical; saving dollars in fuel and maintenance costs

Anytime Ladder 8 is on the public highways; drivers need to use extreme caution. It is a very large vehicle and can be tricky to maneuver through crowded, tight city and county streets.

By running our Tac on emergency medical calls we reduce the risk of property damage either to the ladder or other vehicles. There are plenty of obstacles in our first due area from boulders on the side of an intersection, to tight dead end gravel roads in our territory. These dead end roads force us to do a lot of backing in the Ladder which puts us at risk for a mishap. By utilizing our Tac truck for EMS responses, this helps us minimize and manage risk better then if we were responding in a large apparatus. Obviously, lumbering through the streets in ladder 8 has a bearing on our response times. Tac 8 is much more maneuverable and agile in negotiating tight streets in our district. This maneuverability helps us have quicker, safer response times in our district. We routinely beat EMS to the scene quicker than before when we responded with the ladder. The EMS community has long known quicker access to patients means a better chance of patient survival.

We have some streets that are impossible to get the ladder into, they're simply too tight, or impossible to access, some examples include:

- Craig Circle off Tunnel Rd. many tight dog-leg turns inaccessible with ladder
- Asheville Terrace apts. Lower level apts 100 & 200's; Steep entrance will scrape and damage Ladder; Tac 8 needed to access it.

I have also noticed running Tac 8 is more economical than Ladder 8. Ladder 8 gets approx. 1.5 mpg where as Tac 8 gets approx. 13mpg. We have to fuel Ladder 8 every other day where Tac 8 might get fueled every 10-14 days. I feel by utilizing the Tac on our EMS calls it helps us manage our resources more efficiently which in turn saves the City of Asheville money in fuel and maintenance cost.

In conclusion the Tac makes it easier for us to do our jobs; providing service to the citizens of Asheville. I feel our response times are quicker and this benefits our customers. By utilizing the Tac when appropriate we can do our jobs more efficiently, safer, and provide better service to our community.

### As Reported by Battalion Chief Jack Clark

I would offer that it has been my observation on several occasions that the TAC unit is visually successful as it navigates through downtown traffic. As I have watched its impact upon others, it does not seem to be an extremely overpowering vehicle for the public to frequently deal with. It also seems to demonstrate an ideology of efficiency and agile response. Giving these kinds of impressions while still being able to effectively request motorists to yield them the right of way is a plus. In short, this vehicle does not seem to tax the public's cooperation quite as much as a large ladder truck must do.

Please advise if you or City Council need further information on this item of interest. Thank you for your continuing cooperation and support as we work for continuous improvement in the Asheville Fire and Rescue Department.